

ABSTRACT OF THE DISCLOSURE

There is provided a phase control portion for controlling phase of a laser beam resonated in a resonator based on detected results by two optical detectors. The phase control portion adjusts the longitudinal mode positions by a feedback control so that a ratio of intensities detected by the two optical detectors comes to a predetermined reference value. To one of the optical detectors, part of a laser beam outputted from the resonator is irradiated as it is, whereas, to the other one of the optical detectors, part of the laser beam outputted from the resonator is irradiated after passing through an etalon. An FSR of the etalon is a double of that of another etalon in the resonator.